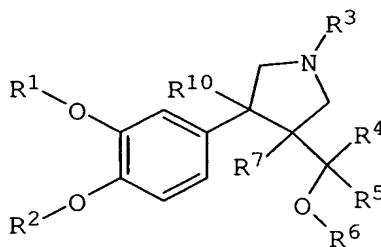


IN THE CLAIMS:

Cancel claims 1-53.

Add new claims 54-74:

--54. (New) A method of treating a mammal having a condition where inhibition of a cAMP-specific PDE is of therapeutic benefit, said method comprising administering to said mammal at therapeutically effective amount of a compound of



wherein R¹ is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C₁₋₄alkylenearyl, C₁₋₄alkyleneOaryl, C₁₋₄alkyleneheteroaryl, C₁₋₄alkyleneHet, C₂₋₄alkylenearyl-Oaryl, C₁₋₄alkylene bridged alkyl, C₁₋₄alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R² is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R³ is selected from the group consisting of C(=O)OR⁷, C(=O)R⁷, NHC(=O)OR⁷, C₁₋₃alkyleneC(=O)OR⁸, C₁₋₃alkyleneC(=O)R⁸, C(=NH)NR⁸R⁹, C(=O)NR⁸R⁹, C(=O)C(=O)-NR⁸R⁹, C(=O)C(=O)OR⁸, C₁₋₄alkyleneOR⁸, aryl, C₁₋₃alkylene-

aryl, C₁₋₃alkyleneheteroaryl, SO₂heteroaryl, Het, and heteroaryl;

R⁴ is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R⁵ is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R⁶ is selected from the group consisting of hydrogen, lower alkyl, and C(=O)R⁷;

R⁷ is selected from the group consisting of lower alkyl, branched or unbranched, C₁₋₄alkylenearyl, cycloalkyl, Het, C₁₋₄alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of OC(=O)R⁸, C(=O)OR⁸, OR⁸, NR⁸R⁹, or SR⁸;

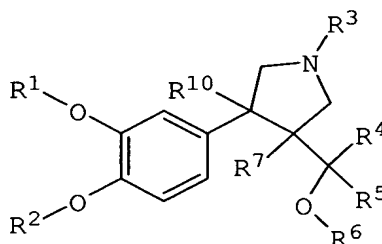
R⁸ and R⁹, same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, C(=O)Oalkyl, C(=O)Oaryl, C(=O)alkyl, alkylSO₂, haloalkylSO₂, C(=O)C₁₋₃alkylenearyl, C(=O)OC₁₋₄alkylenearyl, C₁₋₄alkylenearyl, and Het, or R⁸ and R⁹ together form a 4-membered to 7-membered ring;

R¹⁰ is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, C(=O)-alkyl, C(=O)cycloalkyl, C(=O)aryl, C(=O)Oalkyl, C(=O)-Ocycloalkyl, C(=O)aryl, CH₂OH, CH₂Oalkyl, CHO, CN, NO₂, and SO₂R¹¹;

R¹¹ is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR⁸R⁹;

or a salt or solvate thereof.

55. (New) A method of modulating cAMP levels in a mammal comprising administering to said mammal an effective amount of a compound of



wherein R¹ is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C₁₋₄alkylenearyl, C₁₋₄alkyleneOaryl, C₁₋₄alkyleneheteroaryl, C₁₋₄alkyleneHet, C₂₋₄alkylenearyl-Oaryl, C₁₋₄alkylene bridged alkyl, C₁₋₄alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R² is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R³ is selected from the group consisting of C(=O)OR⁷, C(=O)R⁷, NHC(=O)OR⁷, C₁₋₃alkyleneC(=O)OR⁸, C₁₋₃alkyleneC(=O)R⁸, C(=NH)NR⁸R⁹, C(=O)NR⁸R⁹, C(=O)C(=O)-NR⁸R⁹, C(=O)C(=O)OR⁸, C₁₋₄alkyleneOR⁸, aryl, C₁₋₃alkylenearyl, C₁₋₃alkyleneheteroaryl, SO₂heteroaryl, Het, and heteroaryl;

R⁴ is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R⁵ is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R^6 is selected from the group consisting of hydrogen, lower alkyl, and $C(=O)R^7$;

R^7 is selected from the group consisting of lower alkyl, branched or unbranched, C_{1-4} alkylenearyl, cycloalkyl, Het, C_{1-4} alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of $OC(=O)R^8$, $C(=O)OR^8$, OR^8 , NR^8R^9 , or SR^8 ;

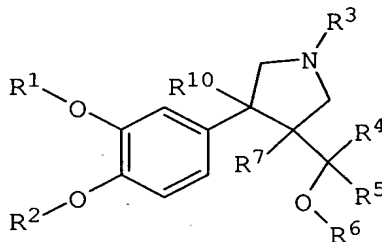
R^8 and R^9 , same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, $C(=O)Oalkyl$, $C(=O)Oaryl$, $C(=O)alkyl$, $alkylSO_2$, $haloalkylSO_2$, $C(=O)C_{1-3}alkylenearyl$, $C(=O)OC_{1-4}alkylenearyl$, $C_{1-4}alkylenearyl$, and Het, or R^8 and R^9 together form a 4-membered to 7-membered ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, $C(=O)-alkyl$, $C(=O)cycloalkyl$, $C(=O)aryl$, $C(=O)Oalkyl$, $C(=O)-Ocycloalkyl$, $C(=O)aryl$, CH_2OH , $CH_2Oalkyl$, CHO , CN , NO_2 , and SO_2R^{11} ;

R^{11} is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR^8R^9 ;

or a salt or solvate thereof.

56. (New) A method of treating a mammal having a condition where inhibition of a cAMP-specific PDE is of a therapeutic benefit comprising administering to said mammal an effective amount of a pharmaceutical composition comprising (a) a compound of



wherein R¹ is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C₁₋₄alkylenearyl, C₁₋₄alkyleneOaryl, C₁₋₄alkyleneheteroaryl, C₁₋₄alkyleneHet, C₂₋₄alkylenearyl-Oaryl, C₁₋₄alkylene bridged alkyl, C₁₋₄alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R² is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R³ is selected from the group consisting of C(=O)OR⁷, C(=O)R⁷, NHC(=O)OR⁷, C₁₋₃alkyleneC(=O)OR⁸, C₁₋₃alkyleneC(=O)R⁸, C(=NH)NR⁸R⁹, C(=O)NR⁸R⁹, C(=O)C(=O)-NR⁸R⁹, C(=O)C(=O)OR⁸, C₁₋₄alkyleneOR⁸, aryl, C₁₋₃alkylenearyl, C₁₋₃alkyleneheteroaryl, SO₂heteroaryl, Het, and heteroaryl;

R⁴ is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R^5 is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R^6 is selected from the group consisting of hydrogen, lower alkyl, and $C(=O)R^7$;

R^7 is selected from the group consisting of lower alkyl, branched or unbranched, C_{1-4} alkylenearyl, cycloalkyl, Het, C_{1-4} alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of $OC(=O)R^8$, $C(=O)OR^8$, OR^8 , NR^8R^9 , or SR^8 ;

R^8 and R^9 , same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, $C(=O)Oalkyl$, $C(=O)Oaryl$, $C(=O)alkyl$, $alkylSO_2$, $haloalkylSO_2$, $C(=O)C_{1-3}alkylenearyl$, $C(=O)OC_{1-4}alkylenearyl$, $C_{1-4}alkylenearyl$, and Het, or R^8 and R^9 together form a 4-membered to 7-membered ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, $C(=O)-alkyl$, $C(=O)cycloalkyl$, $C(=O)aryl$, $C(=O)Oalkyl$, $C(=O)-Ocycloalkyl$, $C(=O)aryl$, CH_2OH , $CH_2Oalkyl$, CHO , CN , NO_2 , and SO_2R^{11} ;

R^{11} is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR^8R^9 ; or a salt or solvate thereof; and

(b) a pharmaceutically acceptable carrier.

57. (New) The method of claim 56 wherein the condition is an allergic disease, an autoimmune disease, an inflammatory disease, an arthritic disease, or dermatitis.

58. (New) The method of claim 56 wherein the condition is rheumatoid arthritis, osteoarthritis, gouty arthritis, or spondylitis.

59. (New) The method of claim 56 wherein the condition is thyroid-associated ophthalmopathy, Behcet disease, sepsis, septic shock, endotoxic shock, gram negative sepsis, gram positive sepsis, toxic shock syndrome, allergic conjunctivitis, vernal conjunctivitis, or eosinophilic granuloma.

60. (New) The method of claim 56 wherein the condition is asthma, chronic bronchitis, allergic rhinitis, adult respiratory distress syndrome, chronic pulmonary inflammatory disease, chronic obstructive pulmonary disease, silicosis, or pulmonary sarcoidosis.

61. (New) The method of claim 56 wherein the condition is reperfusion injury of the myocardium, brain, or extremities as a brain or spinal cord injury due to trauma.

62. (New) The method of claim 56 wherein the condition is a fibrosis, keloid formation, or scar tissue formation.

63. (New) The method of claim 56 wherein the condition is systemic lupus erythematosus, a transplant rejection disorder, a graft vs. host reaction, or an allograft rejection.

64. (New) The method of claim 56 wherein the condition is chronic glomerulonephritis, nephropathy attributed to Type 2 diabetes, an inflammatory bowel disease, Crohn's disease, or ulcerative colitis.

65. (New) The method of claim 56 wherein the condition is proliferative lymphocytic disease or a leukemia.

66. (New) The method of claim 56 wherein the condition is an inflammatory dermatosis, atopic dermatitis, psoriasis, or urticaria.

67. (New) The method of claim 56 wherein the condition is a cardiomyopathy, congestive heart failure, atherosclerosis, pyrexia, cachexia, cachexia secondary to infection or malignancy, cachexia secondary to acquired immune deficiency syndrome, ARC, cerebral malaria, osteoporosis, a bone resorption disease, fever and myalgias due to infection, erectile dysfunction, male or female infertility, diabetes insipidus, a central nervous system disorder, an anxiety or stress response, cerebral ischemia, tardive dyskinesia, Parkinson's Disease, or premenstrual syndrome.

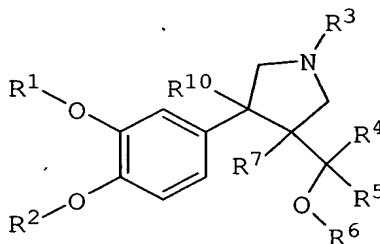
68. (New) The method of claim 56 wherein the mammal exhibits minimal adverse central nervous system side effects.

69. (New) The method of claim 56 wherein the mammal is free of adverse central nervous system side effects.

70. (New) The method of claim 56 wherein the mammal exhibits a minimal emetic response.

71. (New) The method of claim 56 wherein the mammal is free of an emetic response.

72. (New) The method of reducing TNF levels in a mammal comprising administering to said mammal therapeutically effective amount of a compound



wherein R^1 is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C_{1-4} alkylenearyl, C_{1-4} alkyleneOaryl, C_{1-4} alkyleneheteroaryl, C_{1-4} alkyleneHet, C_{2-4} alkylenearyl-Oaryl, C_{1-4} alkylene bridged alkyl, C_{1-4} alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R^2 is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R^3 is selected from the group consisting of $C(=O)OR^7$, $C(=O)R^7$, $NHC(=O)OR^7$, C_{1-3} alkylene $C(=O)OR^8$, C_{1-3} alkylene $C(=O)R^8$, $C(=NH)NR^8R^9$, $C(=O)NR^8R^9$, $C(=O)C(=O)NR^8R^9$, $C(=O)C(=O)OR^8$, C_{1-4} alkylene OR^8 , aryl, C_{1-3} alkylenearyl, C_{1-3} alkyleneheteroaryl, SO_2 heteroaryl, Het, and heteroaryl;

R^4 is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R^5 is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R^6 is selected from the group consisting of hydrogen, lower alkyl, and $C(=O)R^7$;

R^7 is selected from the group consisting of lower alkyl, branched or unbranched, C_{1-4} alkylenearyl, cycloalkyl, Het, C_{1-4} alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of $OC(=O)R^8$, $C(=O)OR^8$, OR^8 , NR^8R^9 , or SR^8 ;

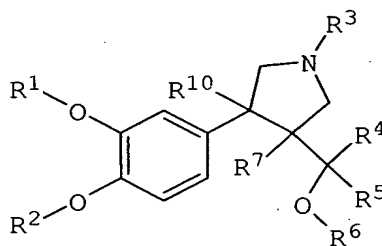
R^8 and R^9 , same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, $C(=O)Oalkyl$, $C(=O)Oaryl$, $C(=O)alkyl$, $alkylSO_2$, $haloalkylSO_2$, $C(=O)C_{1-3}alkylene-aryl$, $C(=O)OC_{1-4}alkylenearyl$, $C_{1-4}alkylenearyl$, and Het, or R^8 and R^9 together form a 4-membered to 7-membered ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, $C(=O)-alkyl$, $C(=O)cycloalkyl$, $C(=O)aryl$, $C(=O)Oalkyl$, $C(=O)-Ocycloalkyl$, $C(=O)aryl$, CH_2OH , $CH_2Oalkyl$, CHO , CN , NO_2 , and SO_2R^{11} ;

R^{11} is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR^8R^9 ;

or a salt or solvate thereof.

73. (New) A method of suppressing inflammatory cell activation in a mammal comprising administering to said mammal a therapeutically effective amount of a compound



wherein R^1 is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C_{1-4} alkylenearyl, C_{1-4} alkyleneOaryl, C_{1-4} alkyleneheteroaryl, C_{1-4} alkyleneHet, C_{2-4} alkylenearyl-Oaryl, C_{1-4} alkylene bridged alkyl, C_{1-4} alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R^2 is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R^3 is selected from the group consisting of $C(=O)OR^7$, $C(=O)R^7$, $NHC(=O)OR^7$, C_{1-3} alkylene $C(=O)OR^8$, C_{1-3} alkylene $C(=O)R^8$, $C(=NH)NR^8R^9$, $C(=O)NR^8R^9$, $C(=O)C(=O)NR^8R^9$, $C(=O)C(=O)OR^8$, C_{1-4} alkylene OR^8 , aryl, C_{1-3} alkylenearyl, C_{1-3} alkyleneheteroaryl, SO_2 heteroaryl, Het, and heteroaryl;

R^4 is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R^5 is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R^6 is selected from the group consisting of hydrogen, lower alkyl, and $C(=O)R^7$;

R^7 is selected from the group consisting of lower alkyl, branched or unbranched, C_{1-4} alkylenearyl, cycloalkyl, Het, C_{1-4} alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of $OC(=O)R^8$, $C(=O)OR^8$, OR^8 , NR^8R^9 , or SR^8 ;

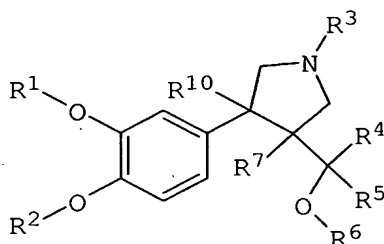
R^8 and R^9 , same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, $C(=O)Oalkyl$, $C(=O)Oaryl$, $C(=O)alkyl$, $alkylSO_2$, $haloalkylSO_2$, $C(=O)C_{1-3}alkylenearyl$, $C(=O)OC_{1-4}alkylenearyl$, $C_{1-4}alkylenearyl$, and Het, or R^8 and R^9 together form a 4-membered to 7-membered ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, $C(=O)-alkyl$, $C(=O)cycloalkyl$, $C(=O)aryl$, $C(=O)Oalkyl$, $C(=O)-Ocycloalkyl$, $C(=O)aryl$, CH_2OH , $CH_2Oalkyl$, CHO , CN , NO_2 , and SO_2R^{11} ;

R^{11} is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR^8R^9 ;

or a salt or solvate thereof.

74. (New) A method of inhibiting PDE4 function in a mammal comprising administering to said mammal a therapeutically effective amount of a compound



wherein R^1 is selected from the group consisting of hydrogen, lower alkyl, bridged alkyl, aryl, cycloalkyl, a 4-, 5-, or 6-membered saturated heterocycle, heteroaryl, C_{1-4} alkylenearyl, C_{1-4} alkyleneOaryl, C_{1-4} alkyleneheteroaryl, C_{1-4} alkyleneHet, C_{2-4} alkylenearyl-Oaryl, C_{1-4} alkylene bridged alkyl, C_{1-4} alkylenecycloalkyl, substituted or unsubstituted propargyl, substituted or unsubstituted allyl, and halocycloalkyl;

R^2 is selected from the group consisting of hydrogen, methyl, and halo-substituted methyl;

R^3 is selected from the group consisting of $C(=O)OR^7$, $C(=O)R^7$, $NHC(=O)OR^7$, C_{1-3} alkylene $C(=O)OR^8$, C_{1-3} alkylene $C(=O)R^8$, $C(=NH)NR^8R^9$, $C(=O)NR^8R^9$, $C(=O)C(=O)-NR^8R^9$, $C(=O)C(=O)OR^8$, C_{1-4} alkylene OR^8 , aryl, C_{1-3} alkylenearyl, C_{1-3} alkyleneheteroaryl, SO_2 heteroaryl, Het, and heteroaryl;

R^4 is selected from the group consisting of hydrogen, lower alkyl, haloalkyl, cycloalkyl, and aryl;

R^5 is selected from the group consisting of hydrogen, lower alkyl, alkynyl, haloalkyl, hydroxyalkyl, cycloalkyl, and aryl;

R^6 is selected from the group consisting of hydrogen, lower alkyl, and $C(=O)R^7$;

R^7 is selected from the group consisting of lower alkyl, branched or unbranched, C_{1-4} alkylenearyl, cycloalkyl, Het, C_{1-4} alkylenecycloalkyl, heteroaryl, and aryl, each optionally substituted with one or more of $OC(=O)R^8$, $C(=O)OR^8$, OR^8 , NR^8R^9 , or SR^8 ;

R^8 and R^9 , same or different, are selected from the group consisting of hydrogen, lower alkyl, cycloalkyl, aryl, heteroaryl, $C(=O)Oalkyl$, $C(=O)Oaryl$, $C(=O)alkyl$, $alkylSO_2$, $haloalkylSO_2$, $C(=O)C_{1-3}alkylene-aryl$, $C(=O)OC_{1-4}alkylenearyl$, $C_{1-4}alkylenearyl$, and Het, or R^8 and R^9 together form a 4-membered to 7-membered ring;

R^{10} is selected from the group consisting of hydrogen, alkyl, haloalkyl, cycloalkyl, aryl, $C(=O)-alkyl$, $C(=O)cycloalkyl$, $C(=O)aryl$, $C(=O)Oalkyl$, $C(=O)-Ocycloalkyl$, $C(=O)aryl$, CH_2OH , $CH_2Oalkyl$, CHO , CN , NO_2 , and SO_2R^{11} ;

R^{11} is selected from the group consisting of alkyl, cycloalkyl, trifluoromethyl, aryl, aralkyl, and NR^8R^9 ;

or a salt or solvate thereof.